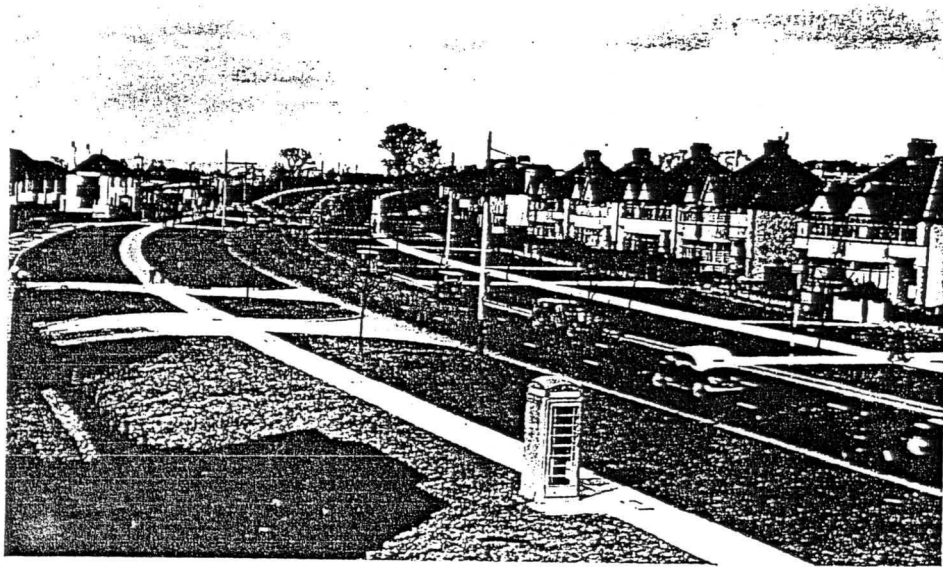


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Chairman	Terence Paul Smith BA, MA, MLitt	Flat 6 6 Hart Hill Drive LUTON Bedfordshire LU2 0AX
Honorary Secretary	Michael Hammett ARIBA Tel: 01494-520299 E-mail michael@mhammett.freemasonry.co.uk	9 Bailey Close HIGH WYCOMBE Buckinghamshire HP13 6QA
Membership Secretary	Keith Sanders (Receives all direct subscriptions, £7-00 per annum*) Tel: 01732-358383 E-mail lapwing@tesco.uk	24 Woodside Road TONBRIDGE Kent TN9 2PD
Editor of BBS Information	David H. Kennett BA, MSc (Receives all articles and items for BBS Information) Tel: 01608-664039 E-mail: kennett_d@strat-avon.ac.uk (term-time only)	7 Watery Lane SHIPSTON-ON-STOUR Warwickshire CV36 4BE
Honorary Treasurer (For matters concerning annual accounts, expenses) and Bibliographer	Mrs W. Ann Los	"Peran" 30 Plaxton Bridge Woodmansey BEVERLEY East Yorkshire HU17 0RT
Publications Officer	Mr John Tibbles	Barff House 5 Ash Grove Sigglesthorne HULL East Yorkshire HU11 5QE
Enquiries Secretary (Written enquiries only)	Dr Ronald J. Firman	12 Elm Avenue Beeston NOTTINGHAM NG9 1BU

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Cover Illustration:

The Watford By-Pass. A typical scene created in the 1930s consisting of a new arterial road, with exceptionally wide verges for road-widening, semi-detached houses, and including a red telephone box.

Editorial: Into the 1930s

In this issue of *British Brick Society Information*, the account of 'Brick and its Uses in the Twentieth Century' reaches the inter-war decades, when brick production doubled. There is a government statistic of 4066.1 million bricks being produced in 1924 whereas in 1938 no fewer than eight thousand million bricks were made according to one reliable estimate.

In writing 'Britain 1919-1939: Brick and Economic Reconstruction' and its companion pieces on 'Britain 1919-1939: Brick for Transport and Power', 'Britain 1919-1939: Brick and the Urban Centre', and 'Britain 1919-1939: Brick and the Human Spirit', care has been taken to minimise consideration of buildings which have appeared in articles in recent issues of *British Brick Society Information*, and the same policy is carried forward to places on which articles are in preparation. Thus, Luton, Bedfordshire, an archetypal 1930s town, is quarried much less than it might have been if our chairman, Terence Paul Smith, had not published 'The 1930s in One Town: Brickwork in Luton' in *BBS Information*, **81**, October 2000. This is despite the fact that the writer of these three articles lived on the outskirts of the town for the first thirty-five years of his life, if not continuously then for the majority of the time: the obvious absence was term time in the undergraduate years. The only building for which an exception is made is the *alma mater* about which the author will write with great affection.

Virtually completed is a paper entitled 'Brick Building in the Depression Years: the City of Salford 1919-1939'. In active preparation is an article on Oxford in the 1930s, particularly the industrial city and the buildings provided for its inhabitants, as opposed to the university's use of brick, which was far less noticeable. Thus, like Luton, Oxford and Salford have been used only sparingly in these articles.

Terence Smith's article on 1930s Luton continues to excite comment, not least because it demonstrates the need for similar studies of other towns in the same decade or a different one.

There are towns whose brickwork in specific decades would seem ideally suited to such studies. From those medium-sized towns wherein the editor has been resident, at least three possible future studies could be pursued. As noted above, an article for use in a future issue of *British Brick Society Information* considers 'Brick Building in the Depression Years: the City of Salford, 1919-1939'. The main weight of building here is in the 1920s. Great Yarmouth has a fine collection of brick and terracotta buildings, especially for leisure and entertainment, from the Edwardian decade. There are also attractive houses in dark red brick decorated with yellow Hathern terracotta and the same materials were used on the new gatehouse buildings of 1905 at the workhouse, one of which was demolished in 1988, and new railway lines which because they needed to cross rivers were carried on embankments faced with blue brindle bricks. Luton presents one of the complex industrial faces of the many uses of brick in the Edwardian decade. Each of these places at a specific time has a good range of brick buildings representative of four or all of the following areas: buildings for work, which includes those for power and transport as well as commercial and industrial buildings; the urban centre and civic buildings; housing; recreation and religion; and education. Although with Edwardian Luton, it would mean working from photographs as many of the buildings have been demolished.

The Edwardian years provide a variety of towns where individual studies of the use of brick and terracotta would be valuable. Bolton, especially in the use of terracotta façades in urban re-development, would repay further study. It is also among the better preserved cotton towns in respect of its primary industry and has brick-built branch libraries, trades union offices, and the splendid terracotta façade of the pupil teacher centre, as well as a new railway station.

Brick buildings constructed between c.1895 and c.1915 present a wide selection of uses and of the uses of brick. I recognise that many of the building types discussed in the article on 'Britain, 1895-1919: The Private Sphere' would repay individual study.

Equally in the twenty years after the Great War, various individual towns could be studied either for both decades together or for a single one. An obvious example is Oxford, particularly the industrial city in the 1930s, as is noted earlier in this editorial. Both Cambridge and Coventry would repay detailed investigation; while less obviously both Leamington Spa and Northampton have a good range of buildings which could be studied. Recent visits to Derby showed another town with a wide range of 1930s buildings surviving: the Council House (town hall), a bus station, a cinema, shops, the research laboratories of Rolls-Royce, and office premises, all with interesting brickwork.

Even places like Salford which at first sight might appear unpromising for brick buildings in the inter-war decades have a not inconsiderable variety. With its twin town of Gorleston-on-Sea, Great Yarmouth has several buildings representative of the uses of brick in the two inter-war decades, despite a decline in population. There are two bus garages and a bus station; a new gas works (mostly demolished); a demolished factory for Smiths Crisps of 1937 built to employ six hundred people; housing representative of most types built in the two decades; public houses and cinemas (one demolished) in the areas away from those frequented by holidaymakers as well as a Roman Catholic church in Gorleston-on-Sea designed by Eric Gill; and four schools. Brick was used, although not always on the street frontages for the rebuilding of shops on the market place.

The list does not examine London and its individual boroughs, partly because for a long time, it has not been the editor's specific stomping ground, although he recently began to think about the buildings of E.W. Mountford. Amongst the old London boroughs, those of the London County Council era (1888-1974), Battersea has a new town hall, a technical college (both by Mountford), a department store (by J.G.S. Gibson), nonconformist chapels and churches, and mass housing, with many buildings still remaining. And it was in London and Middlesex that over one-third of all factories and between a quarter and a third of all houses were built in the two decades between the wars.

Members of the society might well supply their own example, or examples, from the twentieth century or indeed earlier. For example, the eighteenth-century brick buildings of Coventry could form the subject of an interesting study. These include both public buildings and buildings for industry as well as several houses. In the next century, the nineteenth-century public buildings of Salford, all still extant if not in use, certainly would repay study and other towns, e.g. Stafford, have a similar range if built over a longer time-span.

If any member feels shy about starting or would like to think about a study of their town yet lacks access to a good library with long runs of building and architectural periodicals, please contact the editor.

One of the original functions of the British Brick Society was to allow members to be put in contact with like-minded others so as to exchange information. It would be valuable for the editor to extend this aim. He would be quite happy to assist any member in the preparation of an article, particularly in searching out notice of the buildings in the contemporary architectural press, where many are featured.

DAVID H. KENNETT

Editor, *BBS Information*

Shipston-on-Stour, 4 January and 11 July 2002

A Surprise for Peter Minter!

Peter Minter is awarded the Institute of Clayworkers' Long Service Medal

On 13 April 2002, the British Brick Society visited Kentwell Hall, an imposing moated Tudor house completed in 1563.

Peter Minter, proprietor of the nearby Bulmer Brick and Tile Co. Ltd. and a member of the British Brick Society, had been especially invited to attend. His extensive knowledge of historical brick and of restoration and conservation was particularly welcome, but there was an ulterior motive too.

Just prior to the tour Peter was surprised to realise that suddenly he had become the centre of attention when the society's secretary, Mike Hammett, called the party together. After some comments and anecdotes about Peter, Mike explained that he was delighted to have been given the honour of presenting him with the Institute of Clayworkers' Silver Medal for Long Service in the brick and tile manufacturing industry. Everyone expressed hearty congratulations.

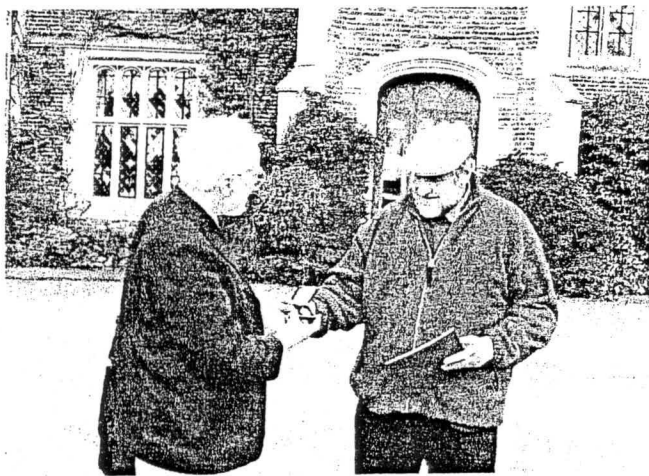


Fig. 1 Peter Minter (right) receives the Institute of Clayworkers' Silver Medal for Long Service.

Photo: John Bentley

Peter's father bought Bulmer in 1936 as a farm and brickyard. When Peter left school and started in the family business he worked mainly on the farm: it was soon after World War Two and a busy period for farming.

After National Service in the early 1950s, he returned to Bulmer and became increasingly involved in brickmaking. When his father died in 1974, Peter became the patriarch of the company which is still run as a family concern; his two sons, Tony and David, are both involved and there are about fifteen employees. Farming and brickmaking continue as complementary activities.

Peter is well respected for his knowledge of traditional brickmaking, historic brick buildings and the techniques of sensitive repair and restoration. He is very enthusiastic about his work and the jobs with which he gets involved and is well known to architects and conservationists through his lectures for which he draws upon a wealth of experience - an experience of over forty years!

MICHAEL HAMMETT

FIRE DRAGONS IN BISHOPSGATE, CITY OF LONDON

Terence Paul Smith

Dragons are obviously mischievous creatures! In *British Brick Society Information*, **81**, Tony Lewis provided a provisional list of dragons (and friends) in London and the Thames Valley, taking the River Lea (or Lee) as his eastern boundary.¹ It was almost on the very day that the issue was published that two dragons showed themselves to me in Bishopsgate, City of London, EC2, which lies within Tony Lewis's area. They are on a building which is itself worthy of consideration.

Bishopsgate is one of those busy and polluted streets along which commuters hurry with scarcely a glance at the buildings, although some are worth looking at. One, opposite Liverpool Street Station, is amongst the more engaging, and it is on its roof that the two dragon finials are to be seen. The building, numbers 162-164, was built as a fire station in 1885. It now contains offices on its upper floors and a Tesco Metro store on the ground floor. The dragons have their mouths agape, as if breathing fire - as dragons will, of course! - and this seems particularly appropriate in view of the original purpose of the building.

It is one of the last works designed by George John Vulliamy (1817-86) for the then Metropolitan Board of Works.² Vulliamy was the nephew of the better known Lewis Vulliamy (1791-1871), an accomplished architect though a man 'known to be peculiar in his notions'. He seems to have been difficult to get on with and quarrelled with all four of his sons. His nephew worked in the office for some years, but left in 1861, 'dissatisfied with his uncle's treatment' of him. He was appointed Superintending Architect to the Metropolitan Board of Works, in which capacity he was responsible, *inter alia*, for the base, ornaments, and bronze sphinxes of Cleopatra's Needle (1878-80) on the Embankment.³

The Bishopsgate fire station is set back a little from the street line and is in a Flemish Gothic style in a rich mix of Portland Stone (with some grey granite in the base), red brick, red terracotta, and red tiles.⁴ The bricks are laid in Flemish Bond using black mortar. Large archways in the bottom storey were provided for ingress and egress of the fire engines. Large letters 'MBW' (for Metropolitan Board of Works) and the words 'FIRE BRIGADE STATION' are carved into the stonework, together with shields and other decorative elements, whilst the inscription 'AD 1885' is formed within large decorative terracotta panels. Simpler terracotta plaques create ornamentation on the upper part of the façade, where there is a large central gable flanked by two smaller gables. The principal roof, interrupted by two large chimney stacks, runs parallel to the street behind the gables and it is here that the dragons appear, making them difficult to see except by standing well away from the building, most advantageously on the steps of Liverpool Street Station. Behind the roof rises an octagonal hose-pipe tower of brick and stone.

The gablet roof is covered with red tiles, the ridge being formed of tiles of a familiar pattern having vertical fins with their upper corners cut off diagonally and with a circular hole piercing them.⁵ The dragons are placed one at each end of the ridge, sitting on the gablets and facing away from the centre of the building. They are in a red fabric and have spread wings, craning necks, and gaping mouths. They are amongst the few to appear on buildings other than private house, public houses, and hotels.

Notes and References

1. T. Lewis, 'Dragons and Friends in London and the Thames Valley', *BBS Information*, **81**, October 2000, 20-22.

2. The Metropolitan Board of Works (formed in 1855, with limited powers within the City) took over responsibility for fire-fighting throughout London in 1868: F. Sheppard, *London: a History*, Oxford, 1998, p.284; for the achievements and failures of the MBW: B. Weinreb and C. Hibbert, (eds.), *The London Encyclopaedia*, revised edn, London and Basingstoke, 1993, p.527, and S. Inwood, *A History of London*, revised edn, London, Basingstoke and Oxford, 2000, pp.435-8.
3. Details of Lewis and George Vulliamy are taken from H.M. Colvin, *A Biographical Dictionary of British Architects 1600-1840*, 3rd edn, New Haven and London, 1995, p.1012, and J.S. Curl, *A Dictionary of Architecture* (= *The Oxford Dictionary of Architecture*), Oxford, 1999, p.716.
4. *Flemish Gothic*, I think, rather than the 'pretty Tudor Gothic' of S. Bradley and N. Pevsner, *The Buildings of England: London 1: The City of London*, London, 1997, p.429; 'pretty' is a characteristic, if infelicitous, 'Pevsnerism'. I imagine he was thinking of German *hübsch*, which is stronger, less feminine, than English 'pretty'.
5. This is the type termed 'notched and perforated crested ridge tile' in G. Emerton, 'Ridge Tiles in North Staffordshire', *BBS North Midlands Bulletin*, 3, June 1975, 9.

And a Dragon has Flown

In 1896, the north side of Chapel Street, Luton, Bedfordshire, was rebuilt as part of a road widening scheme, while the south side retained its older, mainly nineteenth-century, buildings.¹

At the most prestigious new site available in 1897, that on the corner at the junction with the town's main street, George Street, the London and County Bank erected a large single-storey stone-built structure in a style with many classical allusions. This building was replaced by the then Westminster Bank in 1963. Other new buildings followed on the north side of Chapel Street. A brick-built house for the bank manager was followed by two purpose-built shops, the second of which was the town's high class retailer of perambulators, bicycles and toys. Their building has a distinctive square turret covered with slates and with an ornamental ironwork top and formerly a flagpole.²

Adjacent to this and clearly visible on a photograph of 1904 was a three-storey building with its high gable facing the street. On the front of this building was a dragon, poised for flight, its wings raised a little above the horizontal - the underside is clearly visible - and its neck outstretched. Sadly the building is no more: a photograph of 1976 shows it replaced by a more recent structure.³

Further up the same side of Chapel Street a large public house, in the 1970s working as a 'Berni Inn', had two gables, both with finials but neither with a dragon as far as one can judge from the photographs or accurately remember. Certainly Terence Smith's investigations in March 2001 showed the gables now to be without end pieces.

Notes and References

1. Photographs of Chapel Street before 1896 are reproduced H.O. White (ed.), *Luton Past and Present*, Luton: White Crescent Press, 1977, p.57.
2. White, 1977, pp. 58-59; the lack of a flagpole can be clearly seen *ibid.*, p.58 lower photograph.
3. White, 1977, p.59 with 1904 photograph and one of 1976 from further up the street. The 1904 photograph is reproduced in a clearer print, K. Cooper, *Luton Scene Again*, Chichester: Phillimore, 1990, pl.15 The same photograph also records the building discussed in the next paragraph. My thanks to T.P. Smith for going to look at Chapel Street, Luton, for me.

DAVID H. KENNETT

Britain, 1919-1939: Brick and Economic Regeneration

David H. Kennett

INTRODUCTION

There are two views about economic regeneration between 1919 and 1939. The pessimists point to unemployment and more harsh social conditions; a view which can be summed up in a book title of 1990: *Britain on the Breadline*. For others, more optimistic in their assessment, the level of new building in these two decades, and specifically the 4.31 million houses built, suggest that in the building activities and other forms of economic regeneration of these two decades lie the foundations of an affluent society.

For those who take the more optimistic view, brick was one building material which, like all other building materials, contributed to economic regeneration. Brick production figures rose and the buildings for which brick was thought the appropriate material were constructed in ever greater numbers. These two facts underlie this overview of the uses of brick in Britain between the two world wars of the twentieth century.



Fig. 1 More than half the bricks made in any one year between 1919 and 1939 were used in housebuilding. The majority were semi-detached three bedroomed houses designed for occupation by a single family. A typical street of 1930s houses where the same basic floor plan was embellished in many ways to produce individuality between pairs.

One may ask, 'What was brick used for in these two decades?' and the first answer will be house building: investment in new homes (at constant prices) averaged £158 million each year in the 1930s. Non-residential building was not even half this: a mere £74.2 million per annum. House-building absorbed more than half the brick production of Britain in most years up to 1935. The peak year for private house building was 1935, and whilst building of new houses remained at high levels in subsequent years a greater proportion of the increased brick production known for the second half of the 1930s went into large factory buildings.

YEAR	Bricks Produced	Clay Produced	Brickmaking Employees (England)	Brickworks Opened (Closed) (Great Britain)	
	millions	thousand tonnes	number	number	number
1907	4794.7				
1911			45,097 men 2,536 women		
1912	3720.5				
1920		8163			
1921		8494	35,500 men 4,787 women		
1922		6565			
1923		8726			
1924	4066.1	11131			
1925		13429			
1926		13427			
1927		14980			
1928		13654			
1929		14676			
1930	4751.3	15834			
1931		16044	24,000 men 2,242 women		
1932		15233			
1933		18874		2	(1)
1934		22551		24	(2)
1935	7310.3	23930		21	(2)
1936		25187		18	(6)
1937	c.7800	26287		12	(2)
1938	c.8000	27234		8	(2)
1939	8429	24726			

TABLE 1 The Brick and Clay Industries
Brick and Clay Production, and Brickworks Opened and Closed, 1920-1939

Sources: Brick Production figures from Dr R.J. Firman derived from *Census of Production, 1907, 1924, 1930, 1935*, and figures from unpublished 'Census of Production, 1912 and 1939', with additions. The 1937 figure is from D. Yeomans, *Construction Since 1900: Materials*, (1997), p.38.

Clay Production: figures supplied by Dr R. Firman.

Brickmakers: from *Census Reports, 1911, 1921, 1931* using individual county figures. *Note* in 1911, the number of workers in brickworks is given; whereas in 1921 and 1931 bricks and pottery workers are combined and individual occupations are enumerated. Some trades, e.g. kiln men and kiln setters, could apply to either brickmaking or pottery, as do employers, managers and foremen (and forewomen). In cases where a county had both a prominent brick industry and a pottery industry, these occupations have been divided in proportion to the recorded number of the obvious brick and pottery workers.

Brickworks: Board of Trade, *Surveys of Industrial Development, 1933-1938*.

The second call on the money was new building for industry, the other area which is examined in this article. As with mass housing, this use of brick largely represents building rather than architecture as the latter may be artistically understood.

Buildings for transport and the generation of power represent a third call on the available financial resources of the two decades between the wars. Here, either directly or indirectly, the finance was from central government.

Town centre redevelopment, both public buildings and new stores represents the fourth highest call on the money invested in new building in the two decades. This is considered in part three of this review of brick and its uses in Britain 1919-1939. This article will also include consideration of the use of brick in buildings for technical and higher education in the period.

The fifth significant use of brick is for buildings which are designed for the enrichment of the human spirit and these buildings are the subject of the final part of this overview. This forthcoming article looks at brick in churches, brick buildings for recreation and the use of brick in schools. But there is a contrast of attitudes inherent in the conception of the Fisher Education Act of 1918 and those of eighty years on: education as the prime building block of economic regeneration was a concept alien to the minds of politicians or economists.

BRICK PRODUCTION

Brick production in Britain between the wars was high and rising. Relatively accurate figures exist for years when a census of production (1924, 1930, 1935, 1939) was taken, together with estimates for 1937 and 1938; these are given in Table 1, which also includes statistics for the production of common clay. Because of the need of weathering, clay produced in a specific year is not used until one or two years later. Clay tonnages thus precede numbers of bricks produced. If the known common clay production is any guide, an overall guess at the total number of bricks produced in the 1920s is around 38,000 million. On the same basis, an estimate for the 1930s is in the order of 70,000 million.

Brick production was not evenly spread throughout Britain. In 1937, there were 1,462 brickworks in Britain. Of those in England, a large number, 877 in total, were north and west of a line between the Severn and the Wash and this preponderance is partly reflected in the new brickworks opened between 1933 and 1938. The industrial summary for each of these years in *Board of Trade Survey of Industrial Development* records a total of 94 new brickyards, each employing more than twenty-five people, opened in these six years; of these at least a third were in this wide area. Some of these were exceptionally short-lived enterprises, like a brickworks at Ashton-in-Makerfield, near Wigan, and a works producing shale bricks and firebricks at nearby Westhoughton, Lancs., both opened in 1935, which closed before then 1936 survey was completed.

In Scotland, the only closures recorded were two in 1936; and in the six years with detailed records, fourteen new yards were opened.

Many brickworks in the midlands and northern England were essentially small-scale works catering for a local market. In contrast, in south-east England, an economically vibrant area, many new brickworks offered high levels of stable employment and included the thirty-one brickworks then making Fletton bricks from the self-combusting Oxford Clay belt in Buckinghamshire, Bedfordshire and Huntingdonshire. In 1933, a new works at Kempston Hardwick, Beds., created over one hundred new jobs, and two at Water Eaton, Hunts., one hundred and three hundred respectively, while in 1936 the new works at Ridgmont, Beds., was designed to employ over three hundred workers. In five years, these Bedfordshire ventures increased the number of brickyard workers in the county by half as many as are recorded in the 1931 census; in the same period the north Huntingdonshire expansion increased the brickworks'

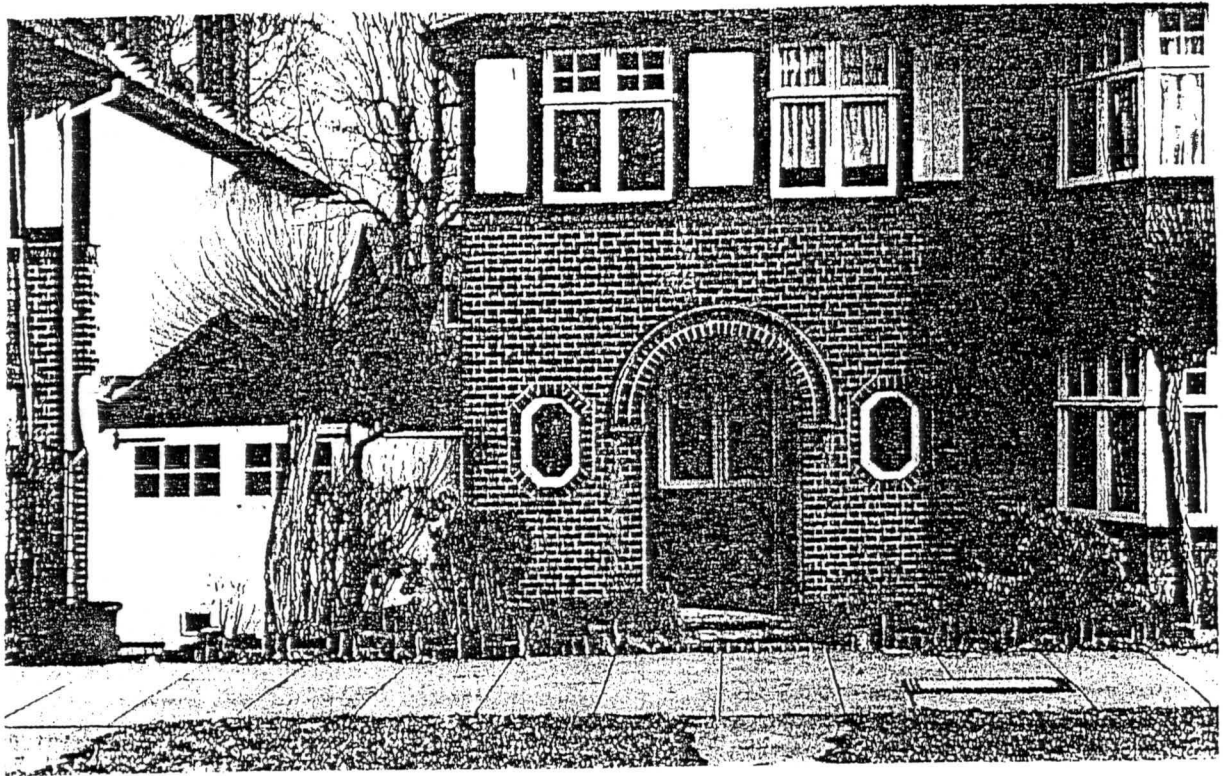


Fig. 2 Flemish bond used in a large bay-fronted house. The bond was achieved by the use of snap headers. Such houses may have the first floor made to appear neo-Tudor with the use of timbers painted black and nailed to a rendered background, as here. Alternatively the first floor might be pebble-dashed. On a group of houses on Burnham Road, Luton, the use of Flemish bond extended to the back of the house. These Luton houses cost £595 each in 1939, when the 'average' price of a new house in the eastern part of the town was £500 and one local builder charged £450 by employing the economies of scale to housebuilding.

workforce by a slightly larger percentage. New works like these by 1935 had made the London Brick Company one of the hundred largest manufacturing employers in the country. With 5,500 workers, it stood seventieth equal in the list of large-scale manufacturing employers in Britain. These new factories contributed to the rising production of Fletton bricks, which included facing bricks from 1923 onwards.

This is not to deny that many of the 365 brickyards in the south-east were small and served a local market only. Transportation costs on a bulk commodity like bricks remained high and many builders had strong preferences for their local product. Many, but not all, of the houses built by the Luton builder E.G. Claydon used 'Luton Greys' as facing bricks at least for the ground floor: the first floor may be rendered. Claydon was not alone among Luton builders in using the local product. The 1939 house in which the author spent his childhood was constructed by another Luton builder; it too had a ground floor of 'Luton Greys' and the distinction of snap headers in the Flemish bond.

By Order in Council, brickmaking ceased in September 1939. The kiln fires were seen as a potential beacon to enemy aircraft. The estate brickworks at Blickling, Norfolk, was three-quarters loaded with green bricks, work ceased and firing never took place. Similarly, finance for building was withdrawn abruptly within minutes of when the banks opened at 10.00 a.m. on Monday 4 September 1939 and mortgage finance for the purchase of new houses disappeared

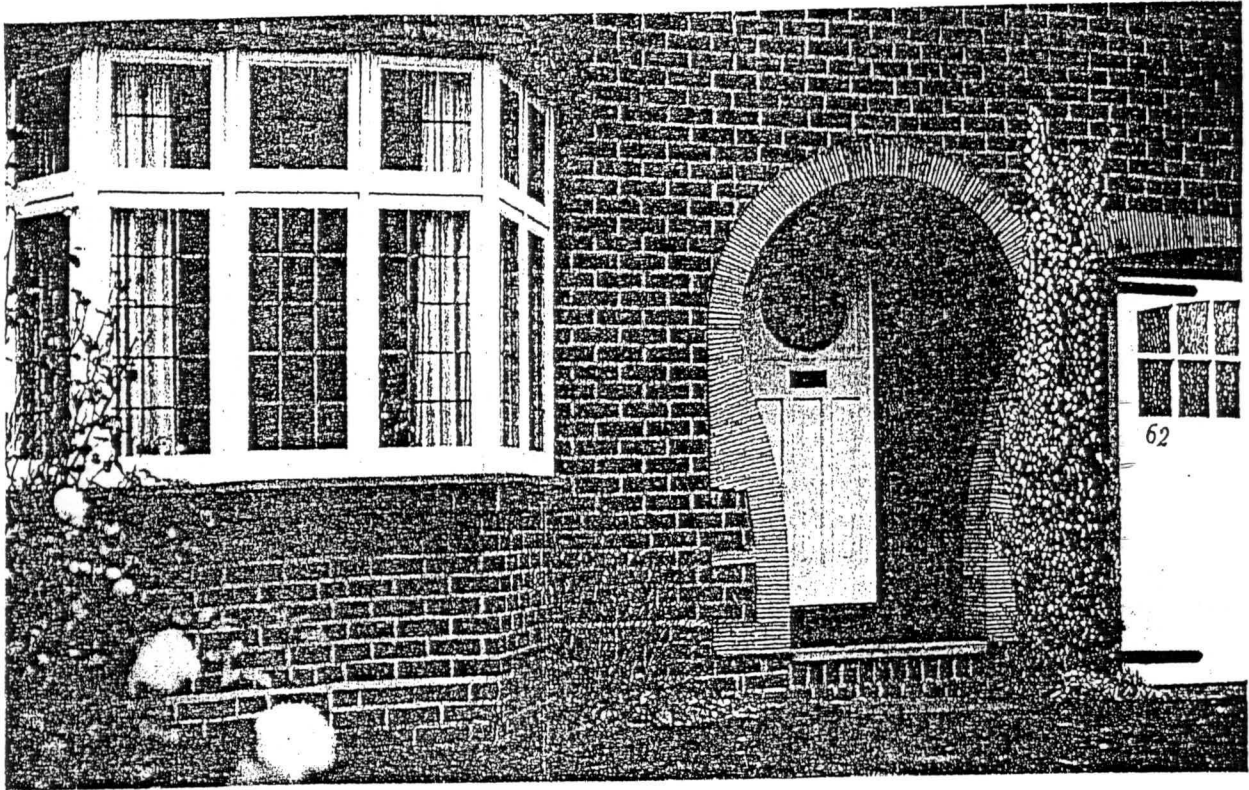


Fig. 3 Stretcher bond used on a bay-fronted house. The majority of semi-detached houses were built using stretcher bond. The porch is picked out by the use of tiles, which echo their use over the garage door. Individual details like this marked this house as different to its neighbours.

within the week. These varied restrictions were modified relatively soon. In contrast to the Great War, the command economy arrived with remarkable speed.

HOUSE BUILDING

The statistics are stark: in 1920-29 in the order of 1.4 million houses were built, in 1930-39 the figure rises to 2.75 million. Annual totals with individual details of the sectors doing the buildings are given in Table 2. In addition, about ten percent of these numbers were municipal flats in larger cities. Luxury flats and service flats were built in London.

Between the two decades there is a contrast. In the 1920s, new housing was provided by local authorities predominates with peaks of building activity in 1922-23 and 1927-30 and again in 1932 and 1936-37. In the 1930s, however, and especially in London and the adjacent counties, private enterprise builders constructing houses for owner-occupation erected 2.073 million houses. Statistics for housebuilding in London are given in Table 3.

Of the houses built during these two decades, whether by local authorities for renting to tenants or by private builders for sale to owner occupiers, approximately 2.5 million are of the semi-detached type, which could use up to eighteen thousand bricks but more usually between eleven and fourteen thousand bricks, or less if breeze or concrete blocks were used for internal walls and the inner skin of the cavity wall. In some cases building by-laws discouraged the use of these substitutes. The substitute materials were less likely to be used for outer walls which were to be rendered; local building by-laws more often discouraged the practice. Brick walls, albeit using non-facing bricks, were required.

YEAR	Local Authority	Private Firms with Subsidy	Private Firms Unsubsidised	Total
1920-22			est 33.0	
1920	0.4	0.1		>1
1921	16.8	13.3		37 (est.)
1922	86.8	21.6		133 (est.)
1923	67.1	21.6	25.8	104
1924	19.6	4.5	69.4	93
1925	23.9	48.8	71.1	144
1926	49.5	66.6	68.3	184
1927	83.7	87.7	65.9	233
1928	102.5	77.7	62.5	261
1929	69.7	52.2	66.0	188
1930	73.3	53.8	93.1	220
1931	64.0	5.6	127.0	197
1932	79.0	5.3	130.1	214
1933	68.2	6.4	147.6	222
1934	72.2	11.3	213.8	297
1935	55.5	1.1	292.7	349
1936	71.2		279.7	341
1937	87.8		281.3	369
1938	93.3		233.8	337
1939	139.9		237.9	378
1940	69.5		151.9	221
1941	25.9		30.8	67

TABLE 2 House Building in Britain, 1920-1941: by sector

Sources: G.D.H. Cole, *The Condition of Britain*, 1937.
B.R. Mitchell, *Abstract of British Historical Statistics*, 1982.

Note: All figures are in thousands of houses built.

YEAR	England and Wales	Gtr London	% Gtr London
	thousands	thousands	percentage
1926	129.2	25.2	19.5
1927	143.5	25.8	18.0
1928	134.9	27.4	20.3
1929	113.8	34.0	26.9
1930	140.2	42.6	30.4
1931	128.0	44.5	35.0
1932	130.7	36.3	27.8
1933	144.5	48.0	33.2
1934	210.7	72.75	34.5
1935	287.5	68.0	23.65
1936	272.0	67.7	24.9
1937	275.2	57.8	21.0
1938	250.7	56.0	22.3
1939	230.5	56.0	24.3

TABLE 3 The London Effect: House Building by private companies, 1926-1939

Source: A.A. Jackson, *Semi-Detached London*.

Not all external walls used facing bricks. Upper floors, in particular, may be rendered, covered with pebble-dash or turned into a neo-Tudor fantasy by the use of thin black-painted timbers in regular pattern.

	All Houses	Greater London (GLC area)	South-East England (not GLC area)	Architects' Own Houses
Brick	102	49	24	11
Painted Brick	132	2	100	4
Rendered Brick	379	197	114	19
Block	63	-	63	-
Concrete	50	18	26	4
Timber-clad	15	3	8	1
Stone	2	-	-	-
<i>Totals</i>	743	269	335	39

TABLE 4 Modern Houses, *i.e.* those with a flat roof, by walling material

- Note:*
1. For a map of the modern GLC area see B. Cherry and N. Pevsner, *The Buildings of England: London 2 South*. (London: Penguin Books, 1983), 2-3; and B. Cherry and N. Pevsner, *The Buildings of England: London 3: North-West*, (London: Penguin Books, 1991), 2-3. Both these maps also mark the boundary of the London County Council 1888-1965.
 2. South East England is the modern counties of Berkshire, Buckinghamshire, Essex, Hampshire, Kent, Surrey, East Sussex and West Sussex.
 3. Count is of individual houses: thus each of a pair of semi-detached houses is counted as a single house. Terraced houses are treated the same: *e.g.* nos 1-3 Willow Road, Hampstead, are counted as 3 houses.
- Source:* J. Gould, *Modern Houses in Britain, 1919-1939*, (London: Society of Architectural Historians of Great Britain, 1977). No additions have been made, for the purposes of the table, although at least five are known: three in Luton, Beds.; one in Stratford-upon-Avon, Warks.; and one in York.

"Modern" Houses

One significant but not especially numerous group of houses are those built in idioms current in the 1930s, distinguished by a flat roof. Under one thousand of these were actually built (see Table 4). Over one-third are in suburban London and its immediate environs in Middlesex, east Essex and north Surrey, the area now within the boundary of the Greater London Council. Four-fifths of all such houses were built in London and south-east England, as is shown by the totals in the second and third columns of Table 4.

Many of the better-known houses, even the iconic 'High and Over' at Amersham, Bucks., have the external surfaces rendered, in this case with bricks as the walling material within a concrete frame. Over half the houses with a flat roof have walls which are either rendered blocks or more often rendered brickwork. Among the better-known houses built like this are those designed by architects like George Checkley in Cambridge and A.J. Seal in Poole for their own occupation.

One hundred of these so-called 'Modern houses' have external walls of exposed brickwork, including a significant group designed by individual architects for their own occupation, mainly but not exclusively in London. Nos. 1-3 Willow Road, Hampstead, by Erno Goldfinger, now a listed building, has a concrete frame, but the outer walls are of brick. Not all were designed by men so renowned: W.M.T. Parsons and W.R. Roydon-Cooper, both based in



Fig. 4 House of modern design in Stratford-upon-Avon built for a local industrialist, Barney Joseph. The architect was H.W. Simister of Birmingham. The main brickwork is in Flemish Garden Wall bond but in the parapet Flemish bond is used.

Yeovil, Somerset, and G.M. Boon at Stafford had essentially local practices. Slightly better-known is C.G. Kemp who built his own house in the Hertfordshire village of Tewin but worked in brick on coal company structures across the whole of England. Two architects working at Welwyn Garden City, also Herts., E.C. Kaufman and Paul Mauger built flat-roofed brick houses in the new town. Originally trained at Liverpool University but later based in London, Greville Spenchley built in brick at Cookham Hill, Kent., and his partner Anthony Minoprio painted his brick house at Sunninghill, Berks. Apart from Goldfinger, probably the two best-known architects to build for themselves in this style using external brick were Francis Lorne of Burnet, Tait and Lorne, who resided at Ascot, Berks., and Reginald Uren, who built a very cubic brick house on Kerry Avenue, Stanmore, Middx.

Other than architects' personal dwellings, important brick houses with other features derived from 1930s idioms include several in Cambridge. That designed by Marshall Sisson in 1931 for the classics professor, A.W. Lawrence, on Maddingley Road is reasonably well-known but the two houses on Wilberforce Road both for historians specialising in medieval studies, Z.N. Brooke and M.M. Postan, of 1933 and 1939 respectively, and both designed by H.C. Hughes, have attracted less attention. Postan, then a Fellow of Peterhouse, also was the motivating force behind the college's acceptance of the flat-roofed design out of three submitted by Hughes and Bucknell for Fen Court. The exterior is brick.

There is a significant group of these "modern" houses with painted brickwork, including the first commission given to Herbert Tayler and David Green, an individual three-storey house in Highgate for Roger Pettiward. After 1949, these two architects, by then inheriting Green's father's practice in Lowestoft, Suffolk, made much use of painted brickwork in their houses for Loddon Rural District Council in the villages of south-east Norfolk.

Roger Pettiward was an artist; Denys Lasdun's client at 32 Newton Road, Paddington,

this time a brick house with a concrete frame was another artist, F.J. Conway.

The client range for this kind of house was very much the same as those who had been attracted to designs by Edgar Wood in the decade before the Great War. In addition to an architect for himself, a significant group were first-, or more probably, second-generation industrialists. Claude Dillingham, a builder, commissioned a white-walled house with a big almost completely circular window on Old Bedford Road, Luton: it is actually rendered brick. H.W. Simister's client for the house illustrated (fig.4) at Stratford-upon-Avon, Warwks., was Barney Joseph, a local industrialist. Both these men, or more probably their wives, preferred a warm Art Deco interior to the stark minimalism of the Modern Movement.

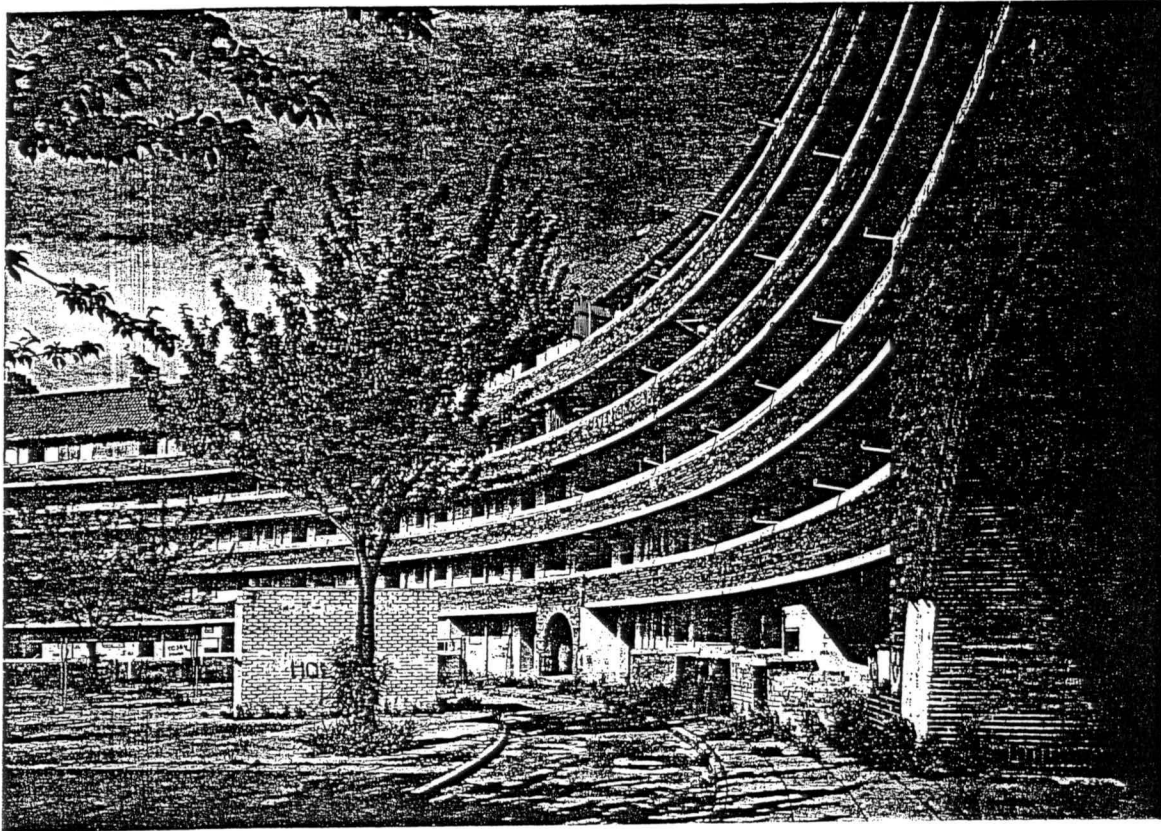


Fig. 5 Flats were built by the municipal authorities in most large cities during the 1930s. One of the few schemes which still survive is St Andrew's Gardens, Liverpool, designed by John Hughes. The scheme cost £133,450 for 316 flats when it was completed in 1935. Exposed brickwork was used because the city had a shortage of plasterers. On the outside face horizontal glazing bars complemented the use of rustication.

Municipal Flats

There are a number of well-known schemes for municipal flats. Some are now demolished: Quarry Hill, Leeds, by R.A.H. Livett, designed in 1935 and completed in 1941, and in Manchester, Kennet House, Cheetham, by the city's then director of housing, Leonard Heywood, opened in 1935. Heywood died soon after the buildings were opened and has not always had the credit he deserves for them. These were big schemes: high rise before the term was current in England. Differing heights of multi-storeyed flats in curving blocks, around courtyards, using bands of exposed brick and plastered brick to make the exterior appear less harsh. One inspiration for these schemes was the workers' flats of the 1920s in Vienna, a city which attracted visits from many architects.

Much of Liverpool's efforts in rehousing in flats in schemes directed by Lancelot Keay was demolished between 1994 and 1997; remaining is St Andrew's Gardens, a semi-circular block with rusticated brickwork, the design of which was by John Hughes. The horizontal glazing bars have been restored; they were such an integral part of Hughes' original design. These are in pale buff brick. Particular attention was paid to the entrances, where the parabola curves are picked out in soldier courses.

In west London, the White City Estate provided a mixed development of flats in five-storey blocks with the deck access fronted by low balcony walls interspersed with two-storey terraced houses. A different external walling pattern was provided by Edwin Lutyens for the City of Westminster with brick in chequered pattern with render.

INDUSTRY

Work or more precisely the lack of it is the dominant theme of some historians' treatment of these two decades. Mesmerised by the high unemployment figures and the failure of the old staples, coal and cotton, the rebirth of the economy with the new staples of mass production goes largely unnoticed. (Table 5 provides figures showing industrial change in four snapshots between 1907 and 1935).

The building type to symbolise industry in Edwardian England had been the brick-built cotton mill. The new age is characterised by concrete façades for factories producing new products: tyres at the Firestone Factory (now demolished) and vacuum cleaners at the Hoover Building. Both significantly in west London not east Lancashire.

Representative of these west London factories is the Park Royal Brewery by Giles Gilbert Scott of 1933-36, an essay in brick massing, which was copied by several other architects in structures elsewhere on Western Avenue, the road into London from Oxford. The Guinness Brewery at Park Royal uses stack bond quite extensively. Other features of the brickwork of these flat-roofed structures are projecting vertical segments and bands of vertical-fluted brickwork round the tops of the three factories. This was one of the most extensive creators of new employment during the inter-war decades, providing four thousand new jobs. To house many of the workers, a large housing estate was built adjacent to the factory, some of which have reinforced concrete internal walls and inner skin to the outer cavity walls; the facing is in good quality bricks.

Further out on the Oxford Road is the Aladdin works, of 1928, now in other uses. The architects were J.E. Dixon Spain and Charles Nichols. The building is a long range facing the main road and is dominated by a great central tower, something which is relatively squat for its bulk: it has been compared to an Italian campanile. The brick tower of the Aladdin building is broad, whereas Bannister Fletcher's factory for Gillette (fig 7) on the Great West Road has a much more slender tower topped by a clock with faces on all four sides. The vast frontage with its interesting arrangement for the windows, including canted bays at their ends, might almost pass for a contemporary town hall.

The geography of productive industry changed. Published statistics for manufacturing plants opened and closed exist only for seven years in the 1930s. Work gravitated to London and south-east England (see Table 6 for summary of new factory building, including London). In contrast north-west England had an overall loss of eighty-three factories, even though 737 new plants providing around eighty thousand new jobs were opened in these seven years.

The manufacture of the new staples of mass production like cars, consumer goods, and entertainment is prominent in the record for these years of large factories opened, those employing over four hundred. An extension to the Ford car factories at Dagenham, Essex, in 1936 was giving work to five hundred and a car bodies plant in Coventry in 1938 was designed

INDUSTRY	1907		1924		1930		1935		1935
	Position	Output	Position	Output	Position	Output	Position	Output	% of total economy
		£m		£m		£m		£m	%
Coal Mining	1	106	1	210	1	139	1	121	8
Mech Engr	2	50	2	87	3	93	2	96	6
Building & Construction	4	43	3	81	2	94	3	87	6
Motor & Cycle	-	-	8	45	5	54	4	61	4
Iron & Steel	5	30	5	54	4	57	5	60	4
Elec Engr	-	-	12	33	8	45	6	57	3.75
Electricity	-	-	-	-	10	40	7	50	3.5
Clothing	7	27	9	45	6	49	8	49	3
Woollen	9	18	6	53	12	38	9	45	3
Brewing	6	28	7	46	7	46	10	43	3
Cotton	3	45	3	84	9	42	11	40	2.5
Gas	10	17	-	-	16	35	12	39	2.5
Newspapers	-	-	13	32	15	37	13	38	2.5
Other Printing	12	15	11	38	13	37	14	37	2.5
Railways	11	17	10	44	11	40	15	36	2.5
Chemicals	-	-	-	-	-	-	16	36	2.5
Bread & Biscuits	-	-	-	-	18	33	17	36	2.5
Local Authority	-	-	14	32	14	37	18	33	2
Tobacco	-	-	-	-	17	31	19	29	2
Shipbuilding	8	21							

TABLE 5 The Chief Economic Activities 1907-1939

Source:

W. Ashworth, *An Economic History of England, 1919-1939*, (1960, pb.1972), p.330.

Notes:

1. Order of industries is that of the 1935 *Census of Production*.

2. Monetary figures are given in £ current. No attempt has been made to offer a constant value for the £.

3. The economic sectors noted represent approximately 75% of the total economy in 1935. Calculations of percentages by D.H. Kennett to nearest 0.25%. The total British economy in 1935 was in the order of £1,600 million (at then current value).

for six hundred workers. The radio was almost universal in British households. Factories for their manufacture were opened in more than one place in Middlesex in 1934: one in Acton had eleven hundred workers and an extension to a factory in Perivale employed six hundred and a further extension employing five hundred was opened in 1936. All of these used brick as the principal walling material.

New manufacturing plants was not confined to London. In 1938-39, Burtons the tailors opened a red brick factory in Lancashire for the mass production of men's suits. It was designed by Wallis, Gilbert and Partners, the architects of the Firestone and Hoover factories in west London. In Manchester, Serge Chermayeff designed factories where brick is used as the walling material but the effect is rendered.

The other feature of the *Surveys of Industrial Development* issued between 1933 and 1938 concerns how much the preparation for the forthcoming war was recorded as big factories for aircraft were opened in 1937 and 1938. The largest two new employment opportunities were five thousand new jobs at Speke, Liverpool, to build aircraft and four thousand jobs created by the building of the Rolls-Royce plant at Derby to make the Merlin engines, much of which still remains beside the main railway line. An especially striking industrial site is that built for the



Fig. 6 One of the largest new industrial buildings of the 1930s was the Guinness Brewery at Park Royal in west London, designed to employ 4000 workers. Particular brickwork features are the substantial massing, the vertical ribs and the parapet in soldier courses. The architect was Sir Giles Gilbert Scott.

production of aircraft engines in 1938 at Standard-Triumph Motors, Coventry. In 1945 it became the factory for the Ferguson T20 tractor. It is one of the buildings where brick is used in a modernistic style.

Between 1932 and 1938, a total of 3,655 factories were opened; however physically, not many can easily be found. Few are memorable and some were almost nondescript. Walling can be as limited as brick panels, one brick thick, set within steel stanchions, such as in extensions to Vauxhall Motors, Luton, of 1933. As may be imagined, this particular block was extremely cold in winter and exceptionally hot in high summer. Typical new factories are the works built for AC Delco at Dunstable, Beds., of 1934 and designed to employ eight hundred, and the factory for Unicorn Engineering, Stafford, opened in 1937, for electrical switchgear and employing two thousand three hundred. Both of these use brick for the external walling, at least on the street or railway façade.

The Goodyear Tyre Factory, Wolverhampton, with a street façade of neatly-laid buff brick complete with a central tower, is much less well finished on the rear, or railway, side. The extension of 1937 provided nine hundred jobs.

Banks

A distinctive feature of the service and transport sectors of the British economy in the two decades is the building of new headquarters. Practically every major bank built a new headquarters in the inter-war years. Most of this building takes place in the 1920s although with the larger structures like the Midland Bank on King Street, Manchester, with construction continuing into the 1930s. The lead came from the Bank of England which replaced Soane's building with one designed by Herbert Baker and built between 1921 and 1937. Photographs of its construction show that the horse and cart was still much in use to transport building materials. Like Martin's Bank, Water Street, Liverpool, and the northern headquarters for the Midland Bank in Manchester, the Bank of England and other national headquarters buildings in London are of stone at least on the capacious exteriors.

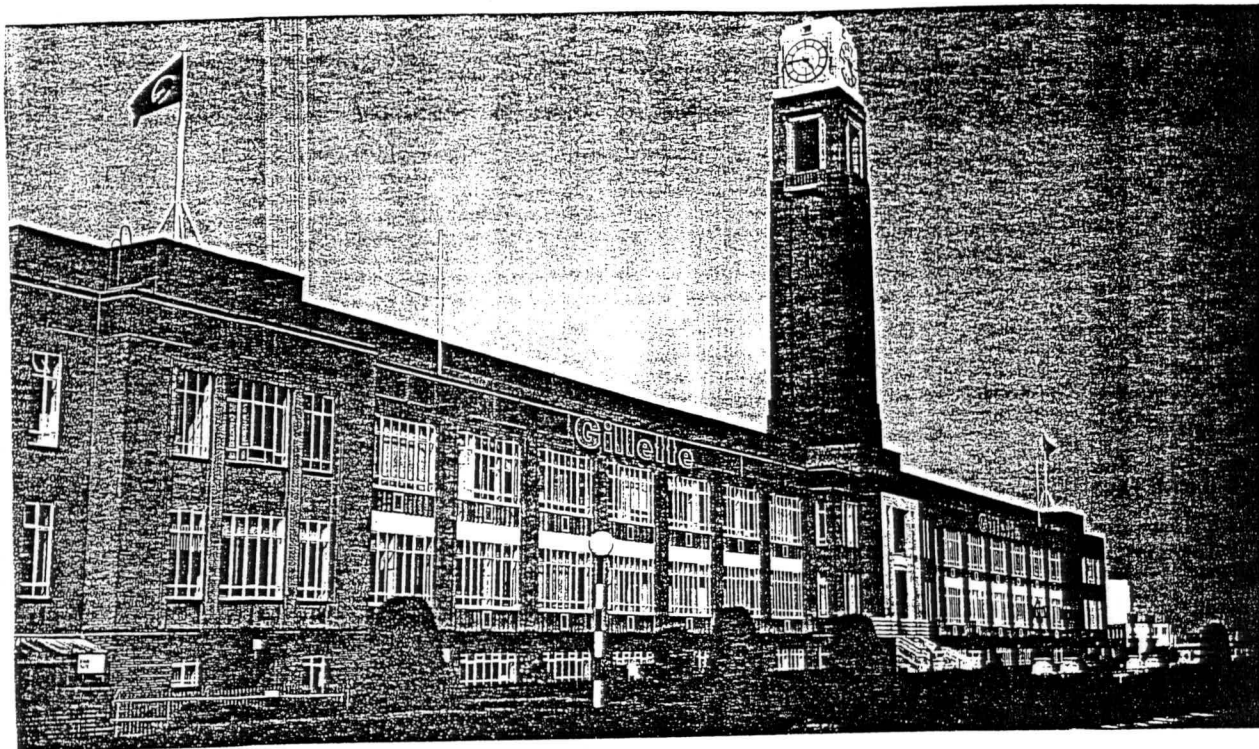


Fig. 7 The Gillette factory is one of the many new factories built in the 1930s in west London.

One bank was different. Barclays used brick for their headquarters on Bank Plain, Norwich, designed by the local firm of E. Boardman and Sons in conjunction with the York firm of Brierley and Rutherford, which retained the former's name even though Brierley had died in 1926. Built between 1929 and 1931, there is a great curving brick facade in red and red-purple thin bricks providing a focus for one corner of a major junction. Small, local branches of Barclays in Headington, Oxford, Harpenden, Herts., and Gorleston-on-Sea, Norfolk, are built of long thin bricks, with both red and purple surfaces. However, the larger branch (now demolished) on George Street, the main street of Luton, Beds., rebuilt immediately before 1915, used 'Luton Greys'.

Branches of the National Provincial Bank use buff brick in Luton but narrow red bricks in the much larger branch in Coventry of 1930 by F.R.C. Palmer; the latter building is marked on the main facade by a giant portico whose columns have Corinthian capitals.

Company Headquarters

Despite the British economy having ceased to be the world's largest economy, the country still boasted ten of the world's fifty largest companies in 1937. Of these, five built new headquarters in London, but as Shell-Mex House of 1931, Thames House of 1929 for Imperial Chemical Industries, Britannic House (now Lutyens House) of 1924-27 for the Anglo-Iranian Oil Company (later British Petroleum), Unilever House of 1930-33 for Lever Brothers, and no. 16 St Martin-le-Grand of 1927 for Courtaulds all show, brick was not the favoured external material, however much they used brick internally.

The Midland Bank's northern headquarters on King Street, Manchester, has been mentioned. Other new building of commercial headquarters premises on this street in the financial centre of the city were likewise clad in Portland stone, a material which was not much in evidence in the city. This change of walling material happened despite good red brick being used on King Street by Alfred Waterhouse for the first Prudential building in the city.

	Great Britain		England and Wales		Gtr London		<i>Gtr London as % England and Wales</i>	
	New Factories	Employment	New Factories	Employment	New Factories	Employment	<i>New Factories %</i>	<i>Employment %</i>
1932	636	53750	616	51300	201	21500	32.6	41.9
1933	467	39700	452	38800	218	14650	48.2	37.75
1934	520	37200	502	35800	235	15750	46.8	44.0
1935	514	63750	491	61600	215	19650	43.8	31.9
1936	542	57850	513	55650	256	22050	49.9	39.6
1937	522	67400	502	65900	204	17100	40.6	25.95
1938	414	53150	393	51550	168	18750	42.75	36.4
1932-38			3,469	360,800	1,497	131,550	43.15	36.46

TABLE 6 The London Effect: New Factories Opened, 1932-1938

Factories opened in Great London as a percentage of factories opened in England and Wales
The percentage is given as of England and Wales to facilitate comparison with Table 3.

Source: Board of Trade, *Survey of Industrial Development, 1933* and subsequent annual issues to *Survey of Industrial Development, 1938*.

Note: Board of Trade, *Survey of Industrial Development, 1933* contains a regional summary for 1932.

Also eschewing brick on the external frontages are buildings for national newspapers constructed in the 1930s. The three buildings in London, of 1931-32, in Glasgow, of 1936, and in Manchester, of 1939, for *The Daily Express* all use black glass. The Manchester building for *The Daily Mail* (now disused) is concrete. The Fleet Street building of 1928 for *The Daily Telegraph* is an essay in monumentality using dressed stone to front a steel-framed building

Another industry to eschew brick for its new headquarters buildings is transport. Neither the headquarters of the London, Midland and Scottish Railway, significantly beside Euston Station (not St Pancras), nor that in Broadway, above St James' Underground Station, for the London Transport Passenger Board, is faced with brick.

It may be depressing to end this part of the examination of brick and its uses in Britain between 1919 and 1939 with a list of major industrial and commercial buildings whose architects chose not to clad these steel-framed structures in brick. But it does show the limits of brick.

As the next article in this series on 'Britain 1919-1939: Brick for Transport and Power' shows brick was used in bus, underground and railway stations just as it was extensively used in factories. However, for those buildings ultimately designed to express corporate prestige, just as very often with town halls, stone rather than brick was deemed politically correct.

AUTHOR'S NOTE

In writing 'Britain 1919-1939: Brick and Economic Reconstruction' and the companion articles, the author has drawn upon four pieces of on-going long-term research. These include details and life histories for *Architects in Britain in the 1930s: a biographical*

dictionary; a sociological study of the architectural profession in the 1930s; a wider study, *Contested Spaces: Rebuilding Britain After the Great War* of which much of a first draft is written; and from an historian's perspective, *The Foundations of an Affluent Society: England 1919-1939*.

ACKNOWLEDGEMENTS

I thank all those who have supplied information incorporated in this paper. They include BBS member Dr Ron Firman, who sent me statistics of brick production and common clay production. In the early 1970s, I talked to a number of men, all now deceased, who had been directors of building firms in the 1930s, including Sir Herbert Janes, E.G. Claydon, various family directors of Costains, and others whose names I have forgotten

Information on the physical conditions inside one 1930s block at Vauxhall Motors, Luton, and on mortgage finance in September and October 1939 was provided by my late father, Douglas Kennett.

I also wish to thank the libraries where I have examined the contemporary architectural and building periodicals, notably Birmingham Central Library, the Central Library, Bristol; the Law Library of Bristol University (where the architecture books and periodicals were in 1995), the Sidney Jones Library of Liverpool University, the library of UMIST, the library of the University of Salford.

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Brick for a Day, 2002

INTRODUCTION

During the early part of 2002, the British Brick Society held three meetings: at St Pancras Chambers, London, on Saturday 23 February 2002, at Fenny Compton and Chesterton, Warwickshire, on Saturday 16 March 2002, and at Gestingthorpe, Essex, and Kentwell Hall, Long Melford, Suffolk, on Saturday 13 April 2002. The first two meetings were arranged by the society's Visits Co-ordinator, David H. Kennett. The morning portion of the Spring Meeting at Gestingthorpe was arranged by Penny Berry and the afternoon part at Kentwell Hall by David H. Kennett. The society is grateful for the hard work put in by those who organise the meetings.

ST PANCRAS CHAMBERS

Our conducted tour of St Pancras Chambers, formerly the Midland Grand Hotel, on 3 November 2001 attracted many more applicants than could be accommodated and so a repeat was quickly booked for Saturday 23 February 2002. David Kennett's account of the first occasion appeared in *BBS Information*, 86, December 2001.

The itinerary of the second visit was similar to the first. We were intrigued by the evidence of former grandeur, but we had the bonus of including a visit to the upper floors and attic storey. The grand hotel catered for guests who travelled with their servants in attendance and the servants were lodged in the upper floors where the accommodation was basic. Even more Spartan was the attic accommodation for hotel staff, with some "rooms" between the roof timbers being accessed by ladders! We were told that there are plans to convert the attic spaces into luxury loft apartments - they could be very spectacular. Our guide's enthusiasm for the building made him a generous leader and we spent much longer than our allotted time enjoying its intricacies.

Several members had lunch in the new British Library next to St Pancras. This exquisite building has wonderful spaces and the workmanship and materials are of outstanding quality.

Bitterly cold wind and rain discouraged any diversions en route to the London Canal Museum where, like our predecessors we were treated to a most interesting tour and welcome refreshments.

MICHAEL HAMMETT

SOUTH WARWICKSHIRE

The meeting in south Warwickshire was arranged as the Spring Meeting 2001, which had to be cancelled due to the restrictions imposed because of the foot-and-mouth epidemic.

The morning was spent examining the brick kiln of the Oxford Canal Company at Fenny Compton, which unusually used the spoil from the opening out of the canal tunnel as the brick earth. A full account of the kiln appears in John Selby, 'The Brick Kiln for the Oxford Canal Company at Fenny Compton, Warwickshire', *British Brick Society Information*, 85, October 2001, pages 21-35. We were extremely fortunate that Mr John Selby came to talk to members at the kiln.

On the way to Chesterton, a brief stop was made to see the post-1800 brick top of the tower of All Saints' church, Harbury. Members also commented on the use of bricks from

Northcott Brickworks, Blockley on houses opposite to the church.

The final visit was to the churchyard of St Giles' church, Chesterton, where there is a brick arch in red gouged brickwork. BBS member, Gerard Lynch, who was responsible for directing its repair and stabilisation, was the guide here and showed a series of plans and restoration photographs. Gerard also introduced members to Mr Edmund Davies, sometime County Architect for Warwickshire, who oversaw the restoration work. The arch served as an entry to the churchyard from the road from the lost great house of the Peyto family on the hill on the other side of the valley. Illustrated notes on the arch, its construction and restoration, by Gerard Lynch were distributed to members present; it is hoped that these will form the basis of an article in a future issue of *British Brick Society Information*.

The society is grateful to John Selby and Gerard Lynch for all the hard work they put in to showing members the fruits of their research.

DAVID H. KENNETT

GESTINGTHORPE, ESSEX

Coming out of Hill Farm at Gestingthorpe which was the second of our visits in the north Essex village, we looked back to see the village church on top of its small hill. Brick tower to the west, with the three-bay nave and long chancel to the east. It had looked like that since 1498 when William Carter gave 40s. to its construction in his will, and probably apart from the red brick tower ornamented with blue brick diaper, it was not a different view in 1085, when King William wore his crown at Gloucester and there had deep speech with the wisest of his men. It so happened that I had been examining the Marxist perspective on class, including Feudalism, in the previous week. One felt that Karl Marx knew little of the landscape history of England. In north Essex as in the Geldable in east Suffolk and much of north Bedfordshire, the farms had been large and compact and in continuous use without parliamentary enclosure since before the time of King Edward the Confessor.

Hill Farm is one such farm. The present farmhouse in 1883 by Frederick Chancellor of Chelmsford, a good local man whose firm still survives. The architect's son, F.W. Chancellor (1865-1945), wrote articles early brick houses in Essex and Hertfordshire in the 1890s when he was concerned with their stabilization.

There was money in the Essex-Suffolk borderlands in the late fifteenth century. In the nave of St Mary's church is a fine double hammer-beam roof, which is illustrated by N. Pevsner and E. Radcliffe, *The Buildings of England: Essex*, (Harmondsworth: Penguin Books, 2nd ed., 1965), pl. 29; the brick tower is the subject of a splendid colour photograph in *Brick in Essex from the Roman Conquest to the Reformation* by BBS member Patricia Ryan; her plate 16b.

There was money in these lands in the Roman period too, for the reason for our visit to Hill Farm was to view the collection of Roman finds picked up by Ashley Cooper and his father on their land. The finds included building materials, particularly roof tiles and box-tiles from a heating system designed to bring heat to the walls of a relatively prosperous villa. As yet no definite villa site has been located.

The British Brick Society is much indebted to Mr Cooper for giving members the opportunity to view his large collection of finds, for showing us round his farm buildings including a medieval timber-framed jettied structure adapted as a small barn, and for making us welcome. We are also most grateful to Penny Berry for suggesting Gestingthorpe as the morning visit on Saturday 16 April and for making the necessary arrangements and for providing her garden as a place to eat our packed lunches.

DAVID H. KENNETT

KENTWELL HALL, SUFFOLK

When the constables of the individual parishes on behalf of the commissioners for the Hearth Tax surveyed Suffolk in 1674, Sir Thomas D'Arcy of Long Melford paid £1 4s. 0d. as the levy on his house. As the tax rate was one shilling per hearth, paid every half year, we know that Sir Thomas' house had 24 hearths. As measured in the number of chimneys, the four dwellings so rated were equal twenty-ninth in size in the register of Suffolk houses. (see *BBS Information*, 37, November 1985, for full details of houses in the 1674 Suffolk Hearth Tax).

Of the four houses with twenty-four hearths, Kentwell Hall is the only one still extant and it is always a pleasure to visit and to be taken round by the owners Mr and Mrs Patrick Phillips. The writer had been before but not for seventeen years, or thereabouts. One always sees new things, not least in the iron screen, re-sited from the road end of the avenue of lime trees planted in 1681, and now joining the new, brick entrance pavilions.

One of the things I did not know before about the house was that outside the moat there was once a free-standing brick gatehouse, which itself had been re-built on a different alignment. Such a gatehouse survives at another Elizabethan house, Charlecote, Warwickshire, but it does prompt one to question how many others there once were.

Like Charlecote, Kentwell Hall is an early Elizabethan house but it is a house with a complex history. Across the inner half of the back third of the moated platform is a range facing south with at its centre an entry leading to the surviving screens passage, a late medieval arrangement. The great hall is to the east. West of this range with its outer wall on the inner edge of the moat is a free-standing range containing the fifteenth-century kitchen, dairy, brewhouse, and other offices, all very much still in use. This is mainly brick but with part of the first floor oversailing the moat timber-framed and now with brick nogging.

The main house was expanded by two parallel ranges. The one to the east on the ground floor is joined to the parlour, now drawing room, created in 1826 by Thomas Hopper in alterations following a fire to the north range in that year. Into the east wing have been various insertions. Internally there is a grand staircase of c.1675 separating the wing from the north range. This replaced the staircase tower of the early Tudor house. Internally Hopper created a billiard room and a library on the ground floor.

Purely on the need for symmetry, a link passage was built, probably in the 1550s, to join the west wing to the former buttery and pantry, now combined as the main dining room. In the south front of the north range a bay window was inserted into the west half to complement the existing bay at the high end of the great hall. This gives the whole south aspect of the house a symmetrical feel with long wings ending in a stair turret beside a gable. The west wing was extended by one room to meet the length of the east wing.

The whole prospect of the house from the south now appears unified but looking at the brickwork here the changes can be seen. These changes are even more visible on the side and rear walls. Georgian sashes have replaced Tudor mullions; windows have been blocked and the roof lowered so that the north range now lacks an attic storey. The change from a single high attic to a double pile with a central gutter produces problems for those living in the house. This was an early-nineteenth-century change not for the better.

Patrick Phillips was a most engaging guide whose enthusiasm for his house and the labour of love for thirty years that has been and continues to be its restoration, upkeep and improvement is infectious. Our tour of the exterior and the ground floor had taken over two hours. After a most welcome tea, his wife, Judith took many of us round the upper floors of the house. Our thanks are due for their generosity and their time in giving members such a wide-ranging tour of their house.

DAVID H. KENNETT

Brick and Tile in Print

From time to time the British Brick Society receives notice of short publications, either as booklets or as articles in periodicals, which are of interest to members of the British Brick Society. Similarly, there are publications not solely concerned with bricks which nevertheless may be of interest to members. Members involved in publication or who come across items of interest are invited to submit notice of them to the editor of *BBS Information*. The unsigned notices are by editor.

DAVID H. KENNETT

1. Vivien Bellamy, 'Upton Cressett Hall',
Country Life, 11 April 2002, pp. 108-113.

The cover of *Country Life* had a colour photograph of the brick gatehouse at Upton Cressett, a building with imposing brick fireplace projections and their diamond-shaped stacks; the first full-page colour photograph shows the rear view of the same building with the two polygonal stair turrets. This building has always been seen as Elizabethan.

Recent dendrochronological work has dated timbers from surviving timber-framed aisled hall, with a magnificent spere truss, to 1431; from the original part of the cross-wing to 1428 and 1430; and from its northward extension to 1498. Just over a century ago, A.J.C. Hare in his *Shropshire*, (1898) had recorded that Richard Cressett (died 1601), Sheriff of Shropshire in 1584, encased the manor house in red brick with blue brick diaper on the outside of the two massive chimney and garderobe projections which dominate the east front. These are each surmounted by four very tall chimney stacks. In 1600, Richard and his wife Jane had their initials placed with the date in a coved ceiling of what is now the principal bedroom.

This house became a farmhouse in the eighteenth century: the Cressett family, rising in status from provincial gentry to confidants of royalty, departed to their new house at Cound, of red brick with stone dressings completed in 1704. Sash windows were inserted for a tenant but by 1954, Upton Cressett was unoccupied and dilapidated. It was rescued from its endangered state and restored by the present owners, Mr and Mrs Bill Cash.

2. Johanna Gibbons, 'London: Bricks and Coloured Surfaces',
Topos, European Landscape Magazine, 32, September 2000, pp. 76-79.

A short article, with bilingual text in German and English, describing the creation of a small park using the foundations of a demolished nineteenth-century brick house in Islington.

3. Joan E. Glover, *The Brickmakers of Doddington, A Family Business 1840-1910*,
Privately published, November 2001, reprinted January 2002. 40 pp., 41 fig. including colour photographs.

Available from the author, Mrs Glover, at 47 Doddington Road, Wimblington, March, Cambridgeshire PE15 0RD, price £5-00 (plus 50 pence packing and postage).

Mrs Glover has researched the brickmaking activities of her ancestors, the Woodbine family, in Doddington. The starting point was a collection of notebooks about the business in the nineteenth century given to her by a cousin. Although incomplete, these notebooks themselves are a rare survival.

Robert Woodbine (1786-1866) was an itinerant brickmaker born at Crownthorpe near

Wymondham, Norfolk, whose children were baptised in Deptford in 1817 and in villages near Wymondham in the 1820s before he settled in Doddington, establishing a brickfield at Parkfield on the parish boundary with Wimblington in 1837. Later this was also conveniently close to the station, from which coal could be transported by horse and cart to the brickfield.

The notebooks record bricks made by Robert's sons and grandsons in Doddington, in villages south of Ramsey, Hunts., and in Littleport and Haddenham, these last for a local landowner, the Earl of Hardwicke. Some of these were used on the Wimpole estate. Robert's sons and a grandson, Gabriel Woodbine, continued to run the brickyard until Gabriel sold it in 1900 to Sampson Hall Farrington.

For over sixty years, the Woodbines had shaped their bricks by hand. Against their advice, Farrington installed brickmaking machinery but the 'clay would not roll'. On Tuesday 3 August 1909, the whole property was sold again in seven lots and eighty-two years of brickmaking ceased.

Interestingly, some of the bricks made at Doddington have been traced to buildings. Most are cottages in Doddington, many now demolished, but a larger house is Holly House, Doddington Road, Wimblington, of 1886. One large building constructed of these bricks was Manea School. A total of 47,200 bricks was carted there over three weeks beginning on 20 January 1877; the building was due for completion on 20 October 1877.

4. Bill Huxley, *100 Years of Clay Winning Machinery - The First 50 Years*. Privately published, 2002. 44 pages, 51 photographs, 4 drawings. Available to BBS members from the author at 46 Loomer Road, Chesterton, Newcastle-under-Lyme, Staffordshire, ST5 7LB. Price £6-50 (including packing and post in the UK).

This new book by Bill Huxley traces mechanisation in industrial clay extraction since its first recorded introduction in the form of a steam shovel acquired *circa* 1902 by B.J. Forder & Sons (the predecessor of the London Brick Company) until the mid 1950s. The A4 paperback presents a truly amazing variety of machines and is generously illustrated. A great number of examples are in brickworks, but extraction for other heavy clayware manufacture is also covered. The informative commentary has been written with an obvious enthusiasm for the subject. Part Two is to follow soon.

MICHAEL HAMMETT

5. Jeremy Musson, 'Restoration House, Rochester, Kent'
Country Life, 11 July 2002, pp.72-77

A lavishly illustrated account of the supposed original of Miss Havisham's house in *Great Expectations* presents a complex brick building with shaped gables to the street frontages of the south wing and the central porch but a hipped roof on the north wing. The brickwork of the two wings is entirely different.

Sir Henry Clerke, a member of the Middle Temple since 1604 and MP for Rochester in the 1620s, had acquired Crows Lane House through his marriage in 1607. As owner of the house he is succeeded by his second son, Sir Francis Clerke, MP for Rochester for much of the reign of Charles II.

Dendrochronological evidence suggests that construction of the north wing belongs to between 1502 and 1522 while the south wing has ceiling joist timbers of as early as 1454 and may originally have been the cross wing of a property to the south of the site. The south wing is now a sophisticated structure of around 1600, to which a central block or east wing was added

in similar style to link it to an existing building, the north wing, which was then given a brick facing. The 1620s and Sir Henry's rise to prominence as the town's MP are suggested as prompting the improvements. Some new brickwork in the Artisan Mannerist fashion was done in the 1640s: there is no record of Sir Henry being dispossessed despite his support for Charles I in the Civil War. Internal work of the 1680s, notably the great staircase and panelling in two first-floor rooms, the so-called King's Room and the great chamber, may be prompted by Sir Francis's position as a prominent supporter of Charles II who came to visit the house in 1660. Later owners maintained the property and the present owners, Robert Tucker and Jonathan Wilmot, open it on Thursdays and Fridays in the summer.

6. Pamela Porter, 'Lighting the Way Community Saves Doña Ana Church',
New Mexico, 79, no.12, December 2001, pp.46-51.

Where England has general interest county magazines, the U.S.A. has state magazines. *New Mexico* is the oldest of these.

The church at Doña Ana, dedicated to Nuestra Señora de la Candelaria, is the oldest in southern part of the state. This simple building, constructed of adobe walls in the 1850s, has been subject various "improvements": brick coping to the parapet and a cement bell tower of c.1900 were followed by cement plaster rendering to the walls in the 1940s. The encasement imprisoned moisture in the mud brick not allowing it to breathe with the result that it began to decay.

The article charts the community's restoration of the old church and points the way to enhancing its historic setting on the Camino Real, the road from Mexico to Santa Fe.

7. Gavin Stamp, 'One of the Queen Anne Folks',
Country Life, 28 February 2002, pages 94-97.

Leamington Spa on the eve of the Victorian Great Depression is the unlikely setting for two works of an unsung hero of the Queen Anne Movement, which in total is so nobly caught by Mark Girouard in *Sweetness and Light The Queen Anne Movement 1860-1900*, (1973). George Gilbert Scott junior (1893-97) gained the commission from the Rev Charles Carus Wilson for St Mark's church (completed 1879) and the adjacent vicarage (designed 1873-73, building completed 1876), of which the article has a splendid colour photograph. It says something of the wealth of the English upper middle class in the 1870s that a newly-beneficed incumbent could afford £7,808 for his own house, including an early tiled private bathroom, as well as the cost of the church. The church thrives; the house, unfortunately, is now divided into flats.

The younger George Gilbert Scott had a brief career: it was cut short by being declared of unsound mind in 1883. He converted to the Roman Catholic Church in 1880, which took away the possibility of Anglican vicarages. After that in Leamington, Scott had designed and built the vicarage in Great Bedwyn, Wilts., (1877-79) costing £2,300 and using the local silver-grey bricks with red brick dressings, and an enlargement of the rectory at Pevensey, East Sussex, for the Rev Robert Sutton, which uses red brick window surrounds joining ground and first floors and rendered as the external materials. This cost £1,844.

Scott's other domestic work of the late 1870s was to design a speculative estate at Westbourne Park, Hull; his cousin, John Spyvee Cooper, was the client. The materials, again, were red brick and render. Earlier in the decade he had completed the rebuilding in white brick and red brick for the dressings of an older house at Garboldisham Manor, Norfolk

Two decades later, George Gilbert Scott junior would die in the Midland Grand Hotel, St Pancras, one of his father's masterworks.

8. Various Authors, 'In Praise of Surrey'
Country Life, 4 July 2002, *passim*,

An idyllic picture on the cover sets the scene. Beside Chingfold village pond is a house with many ceramic building materials: brick on the ground floor, tile-hanging on a jettied first floor, and a tiled roof. The contents include 'Discover Surrey's Secrets' wherein various persons write a paragraph or two on a place known to them. Among the brick items therein are Hatchlands Ice House described by Alec Cobbe; Albury Park is the subject of Alexander Cresswell's contribution and Gavin Stamp writes on Whiteley Village, near Weybridge. Each has a photograph to entice the reader to explore more.

John Martin Robinson describes Titsey Place, near Oxted. It is now owned by the Titsey Foundation, a charitable trust set up by the last private owners, three bachelor brothers, to preserve the estate for public benefit. Sir John Gresham, city merchant, bought the estate in 1534: his benefaction is responsible for Gresham's School at Holt, Norfolk. Sir John's son, William built a large brick and flint house in Elizabeth's reign, which lasted until the eighteenth century. A spendthrift Gresham let the house go to ruin but by 1775, his younger son, another Sir John Gresham, had restored the family fortune, both by marriage to an heiress and by inheritance from a maternal uncle. He built a five-bay red-brick Georgian house with a central pedimented doorway, the core of the present, cemented house. Sir John's heir was his daughter, Katherine Maria, who married the son of Admiral Leveson Gower: Romney's marriage portrait displays the admiral with Frances Boscawen, his bride. William Atkinson cemented and battlemented the house in 1826 and Philip Hardwick added a grand tower in 1856. Aspects of work from all three building periods grace the interiors.

One of Gertrude Jekyll's many Surrey gardens, that at Stilemans, in Munstead, near Godalming is the subject of Anthony du Gard Pasley's article. The house of Bargate stone of 1909 was built for Edward Arnold, the publisher, is by Nicholson and Corlette. It serves to indicate the riches of the building materials of one of England's more unknown counties.

Changes of Address

If you move house, please inform the society through its Membership Secretary, Keith Sanders, at 24, Woodside Road, Tonbridge, Kent, TN9 2PD.

The society has recently been embarrassed by material being returned to various officers from the house of someone who has moved but not told the society of his/her new address.

BRITISH BRICK SOCIETY

MEETINGS IN 2002

The British Brick Society has arranged one further meeting this year as follows:

Saturday 19 October 2002 *Autumn Meeting*

Lord's Cricket Ground

The society has arranged a tour of the buildings of the Marylebone Cricket Club

Details, including costs in this mailing.

These also include comments on where to see other interesting pieces of brickwork in the vicinity of St John's Wood.

Details of the 2003 programme are being worked upon and will be included in an Autumn mailing.

The officers of the British Brick Society welcome suggestions and ideas for future meetings. Notice of brickworks who would be willing to host a visit would be particularly invited. Please contact Michael Hammett, David H. Kennett or Terence Paul Smith. Thank you.